

## Abstract

A laser source for generating amplified and filtered optical output, comprising a VCSEL, a power optical amplifier, and a filter. A laser source for generating amplified and filtered optical output, comprising a first mirror and a second mirror forming a cavity, an optical amplifier disposed in the cavity, and filter means for filtering ASE generated and amplified by the optical amplifier. A system for generating amplified and filtered optical output, comprising an optical platform having electrical connections and a fiber optic connection, a VCSEL configured to generate seed light, an optical amplifier configured to receive and amplify seed light to generate power boosted ASE and a filter configured to reduce background noise from the power boosted ASE. A method of generating optical output having high optical power with high spectral fidelity, comprising generating seed light, amplifying seed light, and filtering the amplified optical output to reduce background noise.

EC/AHURA0607.ABS